

Claims

1. A hinge assembly comprising:

a claw;

a body pivotally connected to the claw and movable to and between a first operative position and a second operative position;

a link assembly operably interconnecting the claw and the body, said link assembly comprising at least one link pivotally connected to the claw and a spring connected between said link and an anchor point;

a latch movably connected to said claw, said latch movable to and between a locked position where it is adapted to engage an associated mounting receptacle to prevent separation of said claw from said mounting receptacle, and an unlocked position.

2. The hinge assembly as set forth in claim 1, wherein said latch prevents said body from moving from said second operative position to said first operative when said latch is located in its unlocked position.

3. The hinge assembly as set forth in claim 2, further comprising:

a cam surface defined by said link; and,

a guide connected to said body, wherein said cam surface of said link movably engages said guide when said body moves between said first and second operative positions.

4. The hinge assembly as set forth in claim 3, wherein said latch, when located in its unlocked position, engages said guide or said body or an appliance door connected to said body and prevents movement of said body from said second operative position to said first operative position.

5. The hinge assembly as set forth in claim 1, wherein said latch comprises first and second tabs that sandwich said claw there between.

6. The hinge assembly as set forth in claim 1, wherein said anchor point for said spring is located on said body of said hinge assembly.

7. The hinge assembly as set forth in claim 1, further comprising:

a first fastener that pivotally interconnects said body to said claw, wherein said at least one link engages said first fastener when said body is moved to its second operative position.

8. The hinge assembly as set forth in claim 1, wherein said claw comprises first and second slots defined therein that are adapted for engaging respective first and second portions of said mounting receptacle.

9. The hinge assembly as set forth in claim 1, wherein said spring comprises a metal coil spring that elongates when said body moves from its first operative position to its second operative position.

10. A door mounting system comprising:

a hinge assembly; and,

a mounting receptacle adapted to mate with said hinge assembly, said mounting receptacle comprising a base defining an opening having a lower edge and an upper edge;

wherein said hinge assembly comprises:

a claw that is adapted for insertion into said opening of said mounting receptacle to couple said hinge assembly to said mounting receptacle;

a body pivotally connected to the claw and movable to and between a first operative position and a second operative position;

a link assembly operably interconnecting the claw and the body;

a latch movably connected to said claw, said latch movable to and between a locked position where it prevents separation of said claw from said mounting receptacle, and an unlocked position.

11. The door mounting system as set forth in claim 10, wherein said latch, when in its locked position, engages said upper edge of said opening of said mounting receptacle to prevent movement of said claw in said opening as required to decouple said claw from said mounting receptacle.

12. The door mounting system as set forth in claim 11, wherein said latch prevents said body from moving from its second operative position to its first operative when said latch is located in its unlocked position.

13. The door mounting system as set forth in claim 12, wherein said link assembly comprises a link pivotally connected to said claw and a spring connected between said link and an anchor point, said link comprising a cam surface and said hinge assembly further comprising a guide connected to said body that engages said cam surface when said body moves between said first and second operative positions.

14. The door mounting system as set forth in claim 13, wherein said latch, when located in its unlocked position, engages said guide or said body or an appliance door connected to said body and prevents movement of said body from said second operative position to said first operative position.

15. The door mounting system as set forth in claim 10, wherein said latch comprises first and second tabs that sandwich said claw there between.

16. The door mounting system as set forth in claim 13, wherein said anchor point for said spring is located on said body of said hinge assembly.

17. The door mounting system as set forth in claim 16, further comprising:

a first fastener that pivotally interconnects said body to said claw, wherein said link engages and stops against said first fastener when said body is moved to its second operative position.

18. The door mounting system as set forth in claim 10, wherein said mounting receptacle further comprises a mounting pin, and wherein said claw comprises first and second slots defined therein that are adapted for respectively receiving said mounting pin and said lower edge of said opening of said mounting receptacle.

19. The door mounting system as set forth in claim 18, wherein said spring comprises a metal coil spring that elongates when said body moves from its first operative position to its second operative position.

20. The door mounting system as set forth in claim 10, wherein said base of said mounting receptacle and said body of said hinge assembly each comprises a U-shaped cross-section.